

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II)
OF THE PATENT COOPERATION TREATY
(PCT Rules 44bis.3(c) and 72.2)

Date of mailing (*day/month/year*)
02 March 2006 (02.03.2006)

To:

YOSHITAKE, Kenji
Kyowa Patent & Law Office, ||Room 323, Fuji Bldg., 2-3,
Marunouchi 3-chome, Chiyoda-ku, Tokyo
100005
JAPON



Applicant's or agent's file reference
146971-121

IMPORTANT NOTIFICATION

International application No.
PCT/JP2004/003649

International filing date (*day/month/year*)
18 March 2004 (18.03.2004)

Applicant
SEIKO EPSON CORPORATION et al

1. Transmittal of the translation to the applicant.

- The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).
- The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Yoshiko Kuwahara

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 146971-121	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2004/003649	International filing date (<i>day/month/year</i>) 18 March 2004 (18.03.2004)	Priority date (<i>day/month/year</i>) 18 March 2003 (18.03.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant SEIKO EPSON CORPORATION			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

Date of issuance of this report 21 February 2006 (21.02.2006)
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Authorized officer

Yoshiko Kuwahara

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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

		Date of mailing (day month year)	
Applicant's or agent's file reference 146971-121		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/JP2004/003649	International filing date (day month year) 18.03.2004	Priority date (day month year)	18.03.2003
International Patent Classification (IPC) or both national classification and IPC			
<p>Applicant SEIKO EPSON CORPORATION</p>			

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

Translation

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/003649

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- a sequence listing
 table(s) related to the sequence listing

b. format of material

- in written format
 in computer readable form

c. time of filing/furnishing

- contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.

3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2004/003649

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-21</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>6-9, 13-15</u>	YES
	Claims	<u>1-5, 10-12, 16-21</u>	NO
Industrial applicability (IA)	Claims	<u>1-21</u>	YES
	Claims		NO

2. Citations and explanations:

- Document 1: JP, 2001-63170, A (Canon Inc.), March 13, 2001 (03.13.01)
- Document 2: JP, 4-26730, U (Seikosha Co., Ltd.), March 3, 1992 (03.03.92)
- Document 3: JP, 2002-127411, A (Ricoh Company, Ltd.), May 8, 2002 (05.08.02)
- Document 4: JP, 2003-34040 (Seiko Epson Corporation), February 4, 2003 (02.04.03)
- Document 5: JP, 2002-200773, A (Canon Inc.), July 16, 2002 (07.16.02)

Claims 1-5, 10-12, 16, 20 and 21

The inventions of claims 1-5, 10-12, 16, 20 and 21 do not appear to involve an inventive step based on documents 1 and 2. Using as a configuration of an ink chamber taught in document 1, the configuration of a bubble trap chamber taught in document 2 would be easy for a party skilled in the art. Also, on which surface of the ink chamber taught in document 1 a porous film taught in document 2 is to be provided is a mere matter of design variation that could be carried out as appropriate by a party skilled in the art. Further, sharing film is a mere matter of design variation that could be conceived of as appropriate by a party skilled in the art.

Claims 6-9 and 13-15

All of documents 1 through 5 indicate the general state of the art.

Claims 17 and 18

The inventions of claims 17 and 18 do not appear to involve an inventive step based on documents 1 through 3. As the porous film taught in document 2, using a polyimide taught in document 3 would be easy for a party skilled in the art.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/003649

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of Box V:

Claim 19

The invention of claim 19 does not appear to involve an inventive step based on documents 1 through 4. In the ink chamber taught in document 1, providing a valve mechanism taught in document 4 would be easy for a party skilled in the art.